

Sph. fabale Pr. Several places in Alabama, evidently common; scarcely different from the more northern form (Ohio, etc.).

Sph. occidentale Pr. Near the Coosa river, 300 good specimens, and a few from the Shoal creek, Ala. (low woods, Mr. Smith); Boligee, Ala. (Mr. Hinkley).

*Calyculina** *elevata* Hald. From various places in Alabama; Columbus, Miss.; also received from Frierson, La.

Cal. transversa Say. From a number of places in the three States, generally small and slight, while from Frierson, La., I have received specimens of large size.

Cal. truncata Linsl. Specimens from near Wetumpka, Ala., are rather resembling the Cal. from New York, Ohio, etc.

Cal. securis Pr. (?) A single specimen from Spring creek, Ebenezer Church, Ala., seems to range under that species.

A small, greenish to brownish *Calyculina* from Grenada, Miss., collected by Mr. Hinkley, may be a variety of *Cal. securis*; the same, although somewhat different, has been seen from Frierson, La.

Of *Eupera*, some specimens have been collected in Alabama, but were not examined. *Eupera* is known to inhabit all the Gulf States (except Mississippi?), and it is very desirable that more materials be brought up for systematic examination.

Although the specimens seen so far hardly justify speaking of lacking species, yet it may be noted that it was surprising not to see a trace of such widely distributed and common species as *Pisidium variabile* Pr. and *punctatum* Sterki; also none of *Sphærium simile* Say and *rhomboideum* Say and, as it seems, *Calyculina partumeia* Say.

SHELL COLLECTING ON THE MOSQUITO COAST OF NICARAGUA.—III.

BY W. H. FLUCK.

Strombus pugilis nicaraguensis var. nov.

The shell differs from the typical *pugilis*, especially in its smaller size, varying very little from 55 to 62 mm. The spire is regularly

* Dr. E. von Martens thinks *Calyculina* Clessin should be replaced by *Musculium* Link.

tuberculated, rather high, acute, and sculptured with distinct revolving raised lines; prominent revolving ridges also mark the entire body-whorl, or in some specimens a large portion of it. The color is uniform dark salmon, except the spire, which tends to whiteness, while the aperture is lighter and brighter than the external parts, and anteriorly has just a suggestion of purple. The epidermis is thin.

Specimens were taken in large quantities, and were fully matured, with lip expanded in the characteristic way. I also have six quite young shells, which contained hermit-crabs, in which the lip is incomplete. My attention was first called to the small size of these shells by my friend Mr. Morris Schick, of Tropico, Cal., to whom I sent specimens from Nicaragua about 1902. I was loth, however, to report the shell as a new variety until Mr. C. W. Johnson wrote me, saying: "The beautiful little Stromb certainly deserves a varietal name. * * * * They are gems, and are as distinct as many of the varieties to which names have been given. They are only about half the size of my Florida and West Indian specimens." I then requested Mr. Johnson to describe the shell in *THE NAUTILUS*, but he generously asked me to do so. I hope this will explain how I came to "butt into" the variety-making business, and will appease the wrath of the bunchers.

I wish to acknowledge that Mr. Johnson has pointed out to me several of the points of difference in my shell, and has also suggested the very appropriate varietal name.

Specimens were taken now and then all along the beach between the Principulka and the Wawa rivers. At Kia, an Indian village 13 miles north of Wounta Haulover, the natives find it in such quantities that it is regularly sought after as an article of food. Boiled "atula," as the Indians call it, is tough eating, almost as tough as old parrot, as I know from experience when dining under the palms at Kia, but "any old thing" satisfies a hungry traveler when plenty of green cocoanut water can be had to wash it down.

Inquiry among the people elicited the fact that most of these molluscs were found just north of the Wawa river, about four miles from the village. I went there and found large quantities of them in the shallow water. This mollusc is a very beautiful one; the eyes are remarkable and seem to be eying one, and are ever on the alert. It is about as active a snail as I ever saw, using its operculum as a lever by which it was enabled to leap out of a glass fruit dish in

which I placed one. The types of this shell are in my own collection and the Boston Society of Natural History. Other collectors, however, have specimens, as I have sent out many sets.

(*To be Continued.*)

NOTES.

NATICA INTRICATOIDES HID. ON THE ALGERIAN COAST.—Last year I mentioned *Natica prietoi* Hidalgo, as found by myself at Algiers. Like *Natica intricatoides*, another very rare species from the Spanish coast, it had not been found before on our shores; now *Natica intricatoides* has been detected also at Algiers by the General de Lamothe, the well-known geologist, who gave me several beautiful specimens. It was associated with *N. filosa*, *N. macilenta* and *N. prietoi*; of the latter he found a single specimen. In the same lot from Sidi-Ferruch in the vicinity of Algiers, I saw a single and very fine *Nassa*, in fair condition, which may be *N. compta* A. Ad., known only as a West African shell.—C. F. ANCEY.

PLANORBIS ALABAMENSIS AND DILATATUS IN THE FLORIDIAN PLIOCENE.—The only small *Planorbis* reported from the Caloosahatchee Pliocene in Dall's great work on that fauna is *P. exacutus* Say. Some years ago I received from Mr. Johnson numerous specimens of another species, *P. alabamensis* Pils. They differ constantly from the recent form in having a decidedly smaller umbilicus. This variety may be called *P. alabamensis arvus*. With these there were a few specimens of *P. dilatatus* Gld., which also differ a little from the typical form in having a smaller aperture and distinctly thickened lip.—H. A. PILSBRY.

NOTE ON CANADIAN UNIO LUTEOLUS.—While examining recently the shells in the collection presented to the Smithsonian Institution by Dr. Isaac Lea, I was surprised to observe that a large green specimen of *Unio luteolus*, from the "Rideau Canal, Ottawa, Canada," had written upon one of its valves in his well-known handwriting the name "*U. radiatus*." The entry number of the shell is 85042. The error would not be remarkable if made by an authority of less repute than Dr. Lea, as many of the male *luteolus* found in the Rideau Canal resemble *radiatus* in outline, coloring and even in the